

## Remarks

Claims 1-27 are pending in this application. Applicants have amended claims 1, 4, 6, 7, 9, 11, 17, 22, and 24-27 to clarify the claimed invention. Applicants respectfully request favorable reconsideration of this application.

Applicants have amended claim 9 along the lines suggested by the Examiner. Accordingly, Applicants respectfully request withdrawal of the objection to claim 9.

Applicants have amended the claims to recite that the transmitter includes information in the electromagnetic waves. This is supported by paragraphs 0016, 0020, 0051 and 0053 of the application as published. Applicants have also amended the claims to recited that the processor is configured to determine whether a target has been hit based on the information related to coordinates in the three-dimensional space for the calculated ammunition trajectory in the received electromagnetic waves. This is supported by the abstract of the application as published.

The Examiner rejected claims 1-27 under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 6,386,879 to Varshneya.

Varshneya does not disclose the present invention as recited in the claims since, among other things, Varshneya does not disclose a weapon simulation system that includes a weapon including a calculating unit configured to calculate an imagined trajectory of simulated

ammunition, a processor configured to determine a geographical position of the weapon, and a transmitter operative to include in the electromagnetic waves information related to coordinates in the three-dimensional space for the calculated ammunition trajectory. Varshneya also does not suggest at least one target including a hit simulation system including a receiver configured to receive the transmitted electromagnetic waves from the weapon and a processor configured to determine whether a target has been hit based on the information related to coordinates in the three-dimensional space for the calculated ammunition trajectory in the received electromagnetic waves.

Rather, Varshneya suggests a target system that determines an impact point for the ammunition, as described at, for example, col. 2, lines 16-19 and 11-14. As described at col. 4, lines 58-62, the impact point is determined by running a ballistic simulation of the ammunition trajectory, but still the calculation is performed at the target system, not the system of the weapon. The Examiner asserts that Varshneya at col. 2, lines 13-20, and Figs. 1A and 1B, suggest a fire simulation system that includes a calculating unit configured to calculate an imagined trajectory of the simulated ammunition. However, it is clear from the above that the calculating unit at the target makes these calculations.

Additionally, Varshneya does not suggest including in electromagnetic waves information related to coordinates in three-dimensional space for a calculated ammunition trajectory. This follows from the fact that Varshneya does not suggest a weapon that calculates coordinates in three dimensional space for the calculated ammunition trajectory. The Examiner asserts that col. 4, lines 43-47, of Varshneya suggest including information in electromagnetic

waves. However, Varshneya only suggests including in the electromagnetic waves position information related to the position of the shooter's system, not to the trajectory of the simulated ammunition.

On the other hand, the claimed invention relates to a weapon effect simulation system, wherein a target can receive electromagnetic waves from a shooter and evaluate whether the target has been hit based on the ammunition trajectory information of the electromagnetic beam received from the shooter.

In view of the above, Varshneya does not disclose all elements of the invention recited in claims 1-27. Since Varshneya does not disclose all elements of the invention recited in claims 1-27, the invention recited in claims 1-27 is not properly rejected under 35 U.S.C. § 102(b). For an anticipation rejection under 35 U.S.C. § 102(b) no difference may exist between the claimed invention and the reference disclosure. *See Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q. 841 (C.A.F.C. 1984).

Along these lines, anticipation requires the disclosure, in a cited reference, of each and every recitation, as set forth in the claims. *See Hodosh v. Block Drug Co.*, 229 U.S.P.Q. 182 (Fed. Cir. 1986); *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985); *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986); and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986).

In view of the above, the reference relied upon in the office action does not disclose

patentable features of the claimed invention. Therefore, the reference relied upon in the office action does not make the claimed invention obvious. Accordingly, Applicants submit that the claimed invention is patentable over the cited reference and respectfully request withdrawal of the rejection based on the cited reference.

If an interview would advance the prosecution of this application, Applicants respectfully urge the Examiner to contact the undersigned at the telephone number listed below.

The undersigned authorizes the Commissioner to charge fee insufficiency and credit overpayment associated with this communication to Deposit Account No. 22-0261.

Respectfully submitted,

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